Falmouth, Massachusetts Special Permit Requriements in Recharge zones

Contact: Jon D. Witten

(508)362-5570 Zoning bylaw Adopted: 1984

5300. PERFORMANCE REQUIREMENTS

- 5310. Nuisances. No use shall be permitted which would be offensive because of injurious or obnoxious noise, vibration, smoke, gas, fumes, odors, dust or other objectionable features, or be hazardous to the community on account of fire or explosion or any other cause. No permit shall be granted for any use which would prove injurious to the safety or welfare of the neighborhood into which it proposes to go, and destructive of property values, because of any excessive nuisance qualities.
- 5320. Site Design. Any new building construction or other site alteration shall provide adequate access to each structure for fire and service equipment, and shall be so designed that for the given location and type and extent of land use, the design of building form, building location, egress points, grading, and other elements of the development could not be reasonably altered
- 1) improve pedestrian or vehicular safety within the site and egressing from it;
- 2) reduce the visual intrusion of parking areas viewed from public ways or abutting premises;
- 3) reduce the volume of cut or fill;
- 4) reduce the number of removed trees 4" trunk diameter and larger, or the area of wetland vegetation displaced;
- 5) reduce the extent of storm water flow increase from the site;
- 6) reduce soil erosion;
- 7) reduce hazard or inconvenience to pedestrians from storm water flow and ponding; and
- 8) reduce glare from headlights or area lighting.
- 5340. Special Permit Requirements in Recharge Zones for Transient Residential Facilities. The Special Permit Granting Authority may withhold approval of a special permit for the construction of any new structure or structures or portion thereof intended for transient residential use, requiring a special permit as defined by the Zoning By-law, which are located on a lot or lots that lie within a zoned water recharge area (See Section 5341), if, after weighing all the pertinent facts and evidence the Special Permit Granting Authority finds that:

- a) The existing condition of the receiving waters is at or above critical eutrophic levels (see definition: Section 5342 (d-4)1 or in the case of well recharge areas, nitrate nitrogen concentrations in the groundwater exceed five (5) parts per million; and
- b) The nutrient contribution from the proposed development, when added to the existing and potential nutrient level of developments within the specific recharge area, will generate on a pounds per acre basis, nutrient levels that exceed the receiving waters critical eutrophic level or, in the case of well recharge areas, nitrate-nitrogen concentrations in the groundwater in excess of five (5) parts per million. However, the Special Permit Granting Authority shall not withhold approval of an application for a special permit if the applicant provides measures for the reduction of the nutrient loading rate, on a pounds per acre basis, to a rate below that which would produce critical eutrophic levels in the water body or, if in a well recharge area, nitrate-nitrogen concentrations less than five (5) parts per million. It shall be the responsibility of the applicant to demonstrate to the Special Permit Granting Authority that the proposed mitigating measures will work as designed and the Special permit Granting Authority may require the applicant to demonstrate on an annual basis that said mitigating measures are operating satisfactorily.
- 5341. Recharge Areas. Recharge areas for freshwater ponds, coastal ponds and existing or proposed public (municipal) water supply well as shown on the Zoning Map, shall be considered superimposed over a other districts established in this By-law.
- 5342. Analysis of Development Impact. The applicant, under Section
- 5340, shall provide an analysis of development impact which at a minimum includes the following:
- a) The existing condition of the water body or water supply, including physical characteristics and water chemistry;
- b) The expected change in the condition of the water body or water supply as a result of the proposed development;
- c) The comparison, on a per acre basis, of the total nutrient loading from the proposed development with:
- 1) The existing and potential loading from all other developments and acreage within the recharge area of the water supply or water body; and
- 2) The loading rate which would be expected to produce critical eutrophic levels in a water body or in the case of water supply, the loading rate which would produce nitrate-nitrogen levels in excess of five (5) parts per million in the groundwater.
- d) In determining the impact of nutrient loading from a development, the following standards and definitions shall be used:*

- 1) Loading per person: 5 lbs. Nitrogen per person per year; .25 lbs. Phosphorous per person per year for sewage disposal systems within 300 feet of the shoreline;
- 2) Loading from lawn fertilizers: 3 lbs. Nitrogen per 1,000 square feet per year;
- 3) Loading from road run-off: .19 lbs. Nitrogen per curb mile per day; .15 lbs. Phosphorous per curb mile per day;
- 4) Critical eutrophic levels: Fresh water concentration, total Phosphorous -- .02 mg./litre; salt water concentration, total Nitrogen .75 mg./litree
- *Unless the applicant demonstrates to the Special Permit Granting Authority that given the nature of the proposed project and/or receiving waters other standards are appropriate.
- 5343. Exemptions. The Special Permit Granting Authority may exempt an application from the requirements of Section 5340 provided that the applicant can demonstrate that:
- a) Nutrients from the development will not in fact be recharged to the designated water body or public water supply well; or
- b) that the development will not result in any increase in loading of the relevant nutrient.
- 5344. Relation To Other Requirements Of The Zoning By-law. Approval of a Special permit as noted in Section 5340 shall not substitute for compliance with any other requirements of the Zoning Act or Falmouth Zoning By-law.